

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-13 (canceled)

Claim 14 (new): A computer-implemented method of searching for best matches in a table storing information in a plurality of rows, wherein each row of the plurality of rows includes a plurality of fields, the plurality of fields including a first field and a second field, the computer-implemented method comprising:

traversing a first tree that stores information from the plurality of rows of the table according to a first value of a plurality of values, the first value being for the first field;

saving the information that is encountered when traversing the first tree in a second tree according to data in the second field; and

traversing the second tree according to a second value of the plurality of values to determine the best match for the plurality of values, the second value being for the second field.

Claim 15 (new): The method of claim 14 further including building the first tree by retrieving a row, retrieving data from the first field, traversing the first tree according to the data, and adding information from the row at an appropriate node of the first tree.

Claim 16 (new): The method of claim 14 further including obtaining the plurality of values.

Claim 17 (new): The method of claim 14, wherein longer matches of the second field take precedence over longer matches of the first field.

Claim 18 (new): The method of claim 14, wherein traversing the second tree includes:

traversing the second tree according to the second value for the second field;

saving the information that is encountered when traversing the second tree in a third tree according to data in a third field; and

traversing the third tree according to a third value of the plurality of values to determine the best match associated with the plurality of values, the third value being associated with the third field.

Claim 19 (new): The method of claim 18 wherein the best match associated with the plurality of values is the best match for the first and third values.

Claim 20 (new): The method of claim 18 wherein the best match associated with the plurality of values is the best match for the first and second values.

Claim 21 (new): The method of claim 18 wherein the best match associated with the plurality of values is the best match for the first, second, and third values.

Claim 22 (new): The method of claim 14 wherein the first value indicates a desired value for the first field in the table and the second value indicates a desired value for the second field in the table.

Claim 23 (new): The method of claim 14 wherein the plurality of values includes a third value, and the best match for the plurality of values is the best match for at least two of the first value, the second value, and the third value.

Claim 24 (new): A computer program product that searches for best matches in a table storing information in a plurality of rows, wherein each row includes a plurality of fields, the computer program product comprising:

computer code that traverses a first tree that stores information from the rows of the table according to a first value of a plurality of values, the first value being associated with a first field;

computer code that saves the information that is encountered when traversing the first tree in a second tree according to data in a second field;

computer code that traverses the second tree according to a second value of the plurality of values to determine the best match for the plurality of values, the second value being associated with the second field; and

a computer readable medium that stores the computer codes.

Claim 25 (new): The computer program product of claim 24, wherein the computer readable medium is one of a CD-ROM, a floppy disk, a tape, a flash memory, a system memory, a hard drive, and a data signal embodied in a carrier wave.

Claim 26 (new): A computer-implemented method of searching for best matches in a table that stores information in a plurality of fields, the plurality of fields including a first field and a second field, the computer-implemented method comprising:

traversing a first tree that stores information from the table according to a first value for the first field, the first value being included in a pair of values, wherein the pair of values further includes a second value;

saving the information that is encountered when traversing the first tree in a second tree according to data in the second field; and

traversing the second tree according to the second value for the second field to determine the best match for the pair of values.

Claim 27 (new): The method of claim 26 further including building the first tree by retrieving data from the first field, traversing the first tree according to the data, and adding information associated with the data at an appropriate node of the first tree.

Claim 28 (new): The method of claim 26 further including obtaining the pair of values.

Claim 29 (new): The method of claim 26, wherein longer matches of the second field take precedence over longer matches of the first field.

Claim 30 (new): A computer program product that searches for best matches in a table that stores information in a plurality of fields, the plurality of fields including a first field and a second field, the computer program product comprising:

computer code that traverses a first tree that stores information from the table according to a first value for the first field, the first value being included in a pair of values, wherein the pair of values further includes a second value;

computer code that saves the information that is encountered when traversing the first tree in a second tree according to data in the second field;

computer code that traverses the second tree according to the second value for the second field to determine the best match for the pair of values; and

a computer readable medium that stores the computer codes.

Claim 31 (new): The computer program product of claim 30, wherein the computer readable medium is one of a CD-ROM, a floppy disk, a tape, a flash memory, a system memory, a hard drive, and a data signal embodied in a carrier wave.